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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,348	07/05/2001	Jon B. Jansma	33413 (LD11485/LD11496)	4925
116	7590	10/28/2003	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			KRISHNAN, SUMATI	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/900,348

Applicant(s)

JANSMA, JON B.

Examiner

Sumati Krishnan

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-13 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 30-33 is/are allowed.
- 6) ☒ Claim(s) 8, 9, 11-13 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

Regarding amended claim 8, Tateiwa et al (US 5417886) does in fact disclose the yttria film coating of old claim 10 that is now added as a limitation in amended claim 8. Tateiwa discloses a phosphor coating liquid, which comprises phosphor particles substantially uniformly coated with yttria particles, coated on the inner surface of a glass envelope of a discharge bulb. See col. 4 lines 33-37 (and col. 2 lines 40-55 which discloses yttria as the adhesive) where Tateiwa discusses one of the methods used for producing his aqueous phosphor coating liquid. Applicant's arguments state that the phosphor particles would be "substantially uniformly coated" with yttria particles when produced through a method such as this.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Tateiwa et al. (US 5417886).

Regarding claims 8 and 26-27, Tateiwa discloses a mercury vapor discharge lamp comprising a light transmissive glass envelope having an inner surface, means for producing a

discharge, a phosphor layer coated adjacent the inner surface, a fill gas of mercury and an inert gas, said phosphor layer comprising phosphor particles and 0.001-5 wt.% yttria, said phosphor layer having crystalline yttria particles dispersed throughout phosphor layer, said phosphor layer further comprising a yttria film coated over the surfaces of said phosphor particles and said inner surface of said glass envelope, and each of said phosphor particles having a yttria film substantially uniformly coated over its surface. See column 4 lines 33-37 and column 2 lines 40-55.

Regarding claim 28, Tateiwa's lamp is free from a barrier layer.

Regarding claim 29, Tateiwa's lamp is sufficiently thin to substantially avoid adverse optical effects.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateiwa (US 5417886) in view of Labib (US 5268614). Tateiwa discloses the lamp of claim 8 but not the phosphor layer being a rare earth tri-phosphor layer. Labib discloses the use of a rare earth tri-phosphor as the phosphor layer and that tri-phosphor coated lamps have the advantage of well-resolved spectral lines which provide better lighting to the human eye than standard cool-white halo-phosphate lamps, which have a broad spectral emission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the tri-

phosphor of Labib in the invention of Tateiwa in order to provide better lighting to the human eye.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateiwa (US 5417886) in view of Jaspers (US 5666027). Tateiwa discloses the lamp of claim 8, but not the coating weight of the phosphor layer. Jaspers however discloses the coating weight of the phosphor layer to be  $2.5 \text{ mg/cm}^2$ . It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the coating weight of Jaspers in order to have a lighter device.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateiwa (US 5417886) in further view of Maloney (US 4079288). Tateiwa discloses the lamp of claim 8, but does not disclose the phosphor layer being a halophosphate layer. Maloney, however, discloses that a halophosphate layer is used as a phosphor layer in the fluorescent lamp disclosed therein. Halophosphate phosphor is less expensive and thus more economically feasible than other rare earth phosphors. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a halophosphate layer as the phosphor layer.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tateiwa (US 5417886) in view of Roozkrans (US 5753999). Tateiwa discloses the lamp of claim 8, but does not disclose the lamp initially containing less than 5 mg of mercury. However, Roozkrans discloses a mercury discharge lamp containing 1 mg of mercury. Since mercury is extremely hazardous to human health, lower levels are always desirable. Therefore, it would have been obvious to one of ordinary skill in the art to have used the mercury level of Roozkrans in the invention of Tateiwa because of its lower dosage of mercury.

***Allowable Subject Matter***

Claims 1-7 and 30-33 are allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record neither shows nor suggests the barrier layer containing crystalline yttria particles in the range from 0.1-10 wt%.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Krishnan whose telephone number is 703-305-7906. The examiner can normally be reached on 8:00 am - 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 703-305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

SK



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2860